Avid® ISIS®
File Gateway Setup and User's Guide

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Using This Guide

The Avid ISIS® File Gateway server enables network users to access the Avid ISIS workspaces in a non-realtime scenario. The Avid ISIS media network provides a high-performance distributed file system that contains high-capacity shared media storage for workgroups of connected workstations.

This document describes the features for all Avid ISIS shared storage networks. Therefore, your system might not contain certain features that are covered in the documentation.

If You Need Help

If you are having trouble using your Avid product:

1. Retry the action, carefully following the instructions given for that task in this guide. It is especially important to check each step of your workflow.
2. Check the latest information that might have become available after the documentation was published.

   New information would be found in the ReadMe file supplied on your Avid software installation kit as a PDF document and is also available online.

   Always check online for the most up-to-date ReadMe because the online version is updated whenever new information becomes available. To view the online versions, visit the Knowledge Base at www.avid.com/US/support.
3. Check the documentation that came with your Avid application or your hardware for maintenance or hardware-related issues.
4. Visit the online Knowledge Base at www.avid.com/US/support. Online services are available 24 hours per day, 7 days per week. Search this online Knowledge Base to find answers, to view error messages, to access troubleshooting tips, to download updates, and to read or join online message-board discussions.

Accessing the Online Documentation

The Avid ISIS online documentation contains all the product documentation in PDF format. You can access the documentation in the AvidISISDocumentation folder on the Avid ISIS installer kit. You need to download and install Acrobat Reader on your Avid ISIS before you can access the PDF documentation.

You need to download and install Acrobat Reader on your Avid ISIS before you can access the PDF documentation.

To access the online documentation from the installer kit:

1. Insert your Avid ISIS USB flash drive with the Avid ISIS software kit into the USB port.
2. Navigate to the *[USB flash drive]*:\AvidISISDocumentation folder, and double-click the PDF file for the document you want to view.

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1 Avid ISIS Gateway Server Overview

The Avid ISIS® File Gateway server enables network users to access the Avid ISIS workspaces in a non-realtime scenario. Depending on the access permission, network users can read, write, and delete files on workspaces without using up ISIS client licenses. This chapter provides an overview of the Avid ISIS File Gateway server.

The File Gateway is a 64-bit AS3000 server with the same image as the 64-bit System Director. If you have a 64-bit AS3000 System Director, you can re-image the System Director by running the latest Product Recovery and install the File Gateway software to convert the System Director into a File Gateway.

The File Gateway software cannot be installed on the System Director in an ISIS | 7500 or ISIS | 5500 environment. The File Gateway is a separate server that is attached to Zone 2 of your Avid ISIS system. However, the File Gateway software does run on the System Director in an ISIS | 2500 environment.

To prepare your site for installation of an Avid ISIS system, see the Avid Products and Network Site Preparation Guide *on the Avid Knowledge Base or included in the documentation folder on the top level of the Avid ISIS installer kit.*

File Gateway Server

The File Gateway server is 1U high (see "File Gateway Server Front Panel" on page 12) and allows users to move files between their local system and Avid ISIS workspaces over the network using Common Internet File System (CIFS), File Transfer Protocol (FTP), or both. The File Gateway server does not store the files; files are stored in the workspaces within the Avid ISIS engine.

Connect the File Gateway server as a Zone 2 client in the Avid ISIS | 7500 environment or Zone 1 client in the Avid ISIS | 5500 environment. Both mirrored and RAID workspaces can be accessed in the ISIS | 7500 environment. File Gateway server allows FTP clients to access Avid ISIS workspaces in a non real-time environment over a WAN/Internet. Avid provides no performance guarantees with Avid ISIS when using an FTP client.

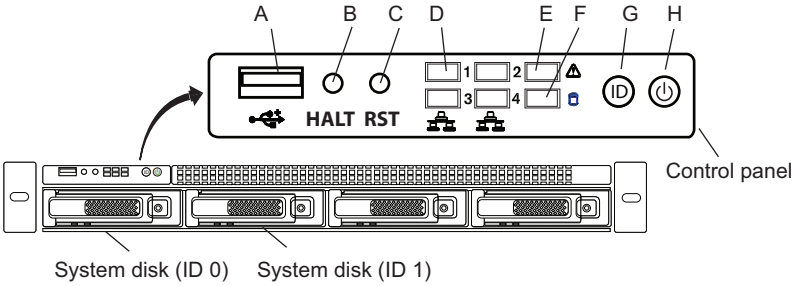
The default File Gateway server password is set to is-admin.

The Avid ISIS System Directors, workgroup servers, and clients must all be synchronized with a common time-of-day. For information on setting the Network Time Protocol (NTP), see your Avid ISIS administrator.

File Gateway Server Front Panel

The following figure shows the front view and control panel of the File Gateway server.

File Gateway Server Front View



The following table describes the control panel shown in the previous figure.

File Gateway Server Panel

Letter	Component	Description
A	Universal Serial Bus (USB) port	USB 2.0 device port on the front of the system supports one USB device. Recommended for use when re-imaging the system drives or loading software. Two more USB ports are located on the back of the system.
B	Halt or Non-maskable interrupt (NMI) button	The halt or NMI signal halts the processor, which effectively halts the server. An NMI is the highest priority interrupt and cannot be masked by software. **If the Halt/NMI button is pressed, the NMI signal locks the system and the system must be restarted to clear the interrupt.**
C	System reset button	Preforms a soft reset when pressed. Do not use this button unless the system has had a fatal error and you need to restart. A soft reset restarts the system; it clears all active program memory (you lose unsaved work) and shuts down all active programs.

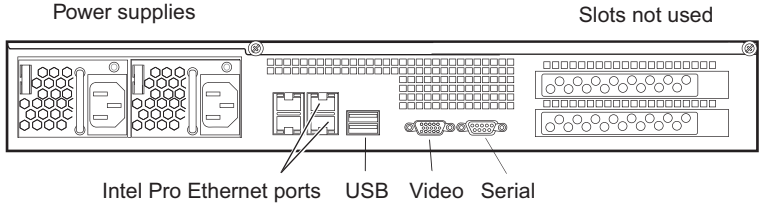
File Gateway Server Panel

Letter	Component	Description
D	Four green network activity LEDs	Illuminates green when a good network connection is established and blinks when there is network activity on the four built-in 1 GB network ports. The number beside the LED corresponds with the number beside the network port on the rear of the enclosure. For example, Connector 1 is LED 1 on the front. See "File Gateway Server Rear Connections" on page 13.
E	Red System error LED	Illuminates red when an error is detected with the system (fan, power supply, temperature, voltage).
F	System Drive activity LED	Indicates drive activity from the onboard SATA controller and blinks when either of the system drives is being accessed.
G	System ID button	When pressed it illuminates (blinks) blue and also illuminates an LED on the rear of the enclosure. The rear LED is also blue and is visible on the lower left-hand side of the Ethernet ports inside of the enclosure. It is used to identify a system for servicing when it is installed in a high-density rack/cabinet populated with several other similar systems.
H	Power button	Press to turn on the enclosure. Power button illuminates green when the power is on.

File Gateway Server Rear Connections

The following figure shows the rear panel of the File Gateway server and the function of each connection.

File Gateway Server Rear View



Product Recovery

The procedure to recover your Avid ISIS File Gateway server is included in the appendix of the *Avid ISIS Setup Guide*. The Product Recovery procedure is the same procedure used for the Avid ISIS System Director.

The Product Recovery restores the Avid specific Windows 2008 Storage Server operating system and the hardware drivers for the AS3000 64-bit server. It does not restore the Avid ISIS software. The Avid ISIS software must be reinstalled separately, after the operating system recovery is complete.

File Gateway Server Client

A File Gateway uses a 1 Gb Ethernet connection to communicate with the Avid ISIS architecture. The File Gateway server displays, creates, and delete files within the Avid ISIS shared storage network system through the Windows operating system as shares that are mapped to drive letters.

Customer Responsibility

Before installing your Avid workgroup hardware, you are responsible for:

- Developing a floor plan for your hardware configuration. This includes the Avid workgroup and attached clients.
- Preparing your site to meet all the proper power, environmental, and space requirements for the Avid hardware and any attached Avid clients. To obtain site requirements for your Avid clients, see the Knowledge Base on the Avid Web site (www.avid.com).
- Obtaining a rack for mounting Avid and Interplay products. For rack recommends, see "Rack Mounting the File Gateway" on page 17.

Choose a rack that has receptacles and plugs appropriate for the power requirements of the hardware you are purchasing.

- Obtaining a display for accessing the File Gateway server through the network.
- Obtaining and running all cables between the Avid hardware and any attached clients throughout your facility.
- Running all cables related to your LAN, and providing the proper network setup and connections.

- Installing and configuring any Ethernet routers or bridges, not supplied with the Avid workgroup, *before* the Avid representative begins your system installation.
- Installing appropriate Ethernet connections within the areas where Avid workgroup and clients are being installed.

Avid is not responsible for installing or troubleshooting cables that you do not purchase from Avid. Avid also does not provide network services for your in-house network and strongly suggests you use a local service provider to install and set up network connections. Avid does supply networking services for any Ethernet connections between the Avid workgroup, its clients, and its servers.

Customer-Supplied Components

You must supply the following components in Avid shared storage environments and workgroups:

- Avid qualified or approved Gig-E Ethernet switch with 10 Gb ports
- Industry 19-inch standard rack
- Uninterruptible Power Supply (UPS)
- A keyboard, video, and mouse switch (KVM)

Security Considerations

Address all security concerns for the Avid hardware during site planning. Planning and implementing security for the hardware before installation helps you avoid disrupting or moving the hardware and users at a later time.

If you have a secured network area for the Avid hardware, you might need to arrange security clearance for the Avid administrators who access the hardware.

Cabling Considerations

When planning your cable routes, make sure your cables cannot be damaged by traffic or moving objects. See “Supported Cabling” on page 63 for a list of supported cable types and lengths.

Network Configuration

All clients in the shared storage network are classified by zones, depending on how they connect to the network. For more information on the supported File Gateway zones, see “ISIS | 5500 Configurations” on page 30. The following list defines the clients in each network layer by their zone classification:

Computer Names

A hostname must comply with RFC 952 standards. For more information, see “Naming Conventions in Active Directory for Computers, Domains, Sites, and OUs” on the Microsoft Support Knowledge Base.

Entries on the DNS Server

Make sure that you correct any errors in DNS entries for name to IP resolution. The Avid network can become sluggish and unstable if there are incorrect entries in the DNS server for any of the computers in the environment.

If your work environment includes Avid Interplay servers you might need to configure your DNS server to support Reverse Lookups. Reverse Lookup is required for the Interplay Framework.

Computers with Multiple Network Interfaces

Computers that have multiple network interfaces in use must be entered in DNS so that all IP addresses have the same hostname. The File Gateway should have separate and unique DNS entries for each network port IP address.

If you have multiple network interfaces on a computer and one is not used, use the Device Manager to disable the interface.

Configuring an Avid System

In an Avid ISIS environment, if your network extends outside of ISIS Zone 1 and Zone 2, you must configure a Layer 3 switch/router to communicate between the two subnetworks.

2 Connecting the ISIS Equipment

This chapter explains how to rackmount and connect the system hardware.

Rack Mounting the File Gateway

The File Gateway server is designed for 19-inch (483-mm) rack configurations and requires one EIA rack unit (1U), or 1.75 inches (44.45 mm) of rack space. The rail kit installs into rails that are between 23 inches (584.2 mm) to 31 inches (787.4 mm) inches deep. An optional rail kit is available for racks that are up to 37 inches deep.

The File Gateway server includes rack mounting slide rails. If instructions are included with your rail kit, use them instead of the instructions included in this section. The standard rail configuration is for racks with square mounting holes. Optional brackets are included for racks with round holes. The rack-mounting kit requires mounting inner slide rails to the server and mounting outer slide rails to the rack. Once both the inner and outer rails are in place, slide the server with the inner rails attached into the outer rails. Secure the server in the front of the rack using the supplied screws.

The File Gateway server is designed to be installed horizontally in a rack. Installing the File Gateway server on an angle or in a sloped console causes the internal drives to wear faster than the intended life of the drive.

To ensure the stability of the rack enclosure, install the heaviest equipment at the bottom of the rack enclosure, and install lighter equipment in the middle and top.

Before rack-mounting your Avid ISIS equipment:

- Avid recommends that you leave a 1U or .5U space between each piece of equipment mounted in the racks. This allows for better airflow and cable access, and helps stop vibration in any equipment being transferred to spaces above and below.

The File Gateway server has vent holes on the top of the enclosure. Avid has performed thermal testing with the top vent holes blocked, and the results indicated that even with the top vent holes blocked, the File Gateway server still operates within the temperature tolerances.

- Avid recommends that you leave an 8 to 12 inch space at the bottom of the rack. This allows for better airflow and lowers the possibility of dust or dirt being picked up by the devices.
- For normal operation, maintain approximately 2 feet (0.6 meters) of open space in front of and behind the rack. This allows free access to the components in the rack for operating changes or adjustments. For service, leave approximately 3 feet (1 meter) of open space in front of the rack and 2 feet (0.6 meters) of open space behind the rack. This allows for the removal of any component that needs to be replaced.

Rack-mount Requirements

(Hebrew) דרישות לשיבוץ כונן

- Elevated Operating Ambient — If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment might be greater than room ambient. Make sure the rack environment is compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

סביבת הפעלה מוגבהת — במקרה של התקנה בהרכבה סגורה או מרובת-יחידות בשיבוץ כונן, טמפרטורת הסביבה במארז עשויה להיות גבוהה מזו של סביבת החדר. לכן, שקלו להתקין את הציוד בסביבה המתאימה לטמפרטורת הסביבה המרבית (Tma) שצוינה על-ידי היצרן.

- Reduced Air Flow — When installing equipment in a rack, make sure not to block the amount of air flow required for safe operation.

  Avid ISIS airflow is from the front of the enclosure to the rear. Make allowances for cooling air to be available to the front panel surface and no restrictions at the rear.

זרימת אוויר מופחתת — התקנת הציוד בשיבוץ כונן צריכה להיעשות כך שכמות זרימת האוויר הדרושה להפעלה הבטוחה של הציוד תתקיים. זרימת אוויר ב-Avid ISIS מגיעה מהמארז לחלק האחורי.

אפשרו מעבר של אוויר קירור אל משטח הלוח הקדמי, ללא מחסומים בצד האחורי.

- Mechanical Loading — Avoid uneven mechanical loading.

  Make sure your rack enclosure is stable enough to prevent tipping over when one or more Avid ISIS servers are extended on the sliding rails.

עומס מכני — הרכבת הציוד בשיבוץ כונן צריכה להתבצע באופן המונע מצבים מסוכנים עקב עומס מכני לא-שווה.

ודאו שהמארז יציב מספיק כדי למנוע נטייה של הציוד כשמערכת Avid ISIS אחת או יותר נמצאות על מסילות ההחלקה.

- Circuit Overloading — Follow the equipment nameplate ratings to avoid overloading the circuits.

עומס יתר במעגל — יש להתחשב בחיבור הציוד לאספקת חשמל ועל ההשפעה שעשויה להיות לעומס יתר על הגנה מפני עומס יתר וחיווט אספקה. יש להקדיש שיקול דעת ראוי בנוגע לדירוגי ציוד בעת טיפול בעניין זה.

- Reliable Grounding — Maintain reliable grounding of rack-mounted equipment especially to supply connections other than direct connections to the branch circuit (for example, use of power strips).

הארקה אמינה — יש לשמור על הארקה אמינה של ציוד משובץ כונן. יש להקדיש תשומת לב מיוחדת לחיבורי אספקה מלבד חיבורים ישירים להסתעפות המעגל (לדוגמה, שימוש במפצלים).

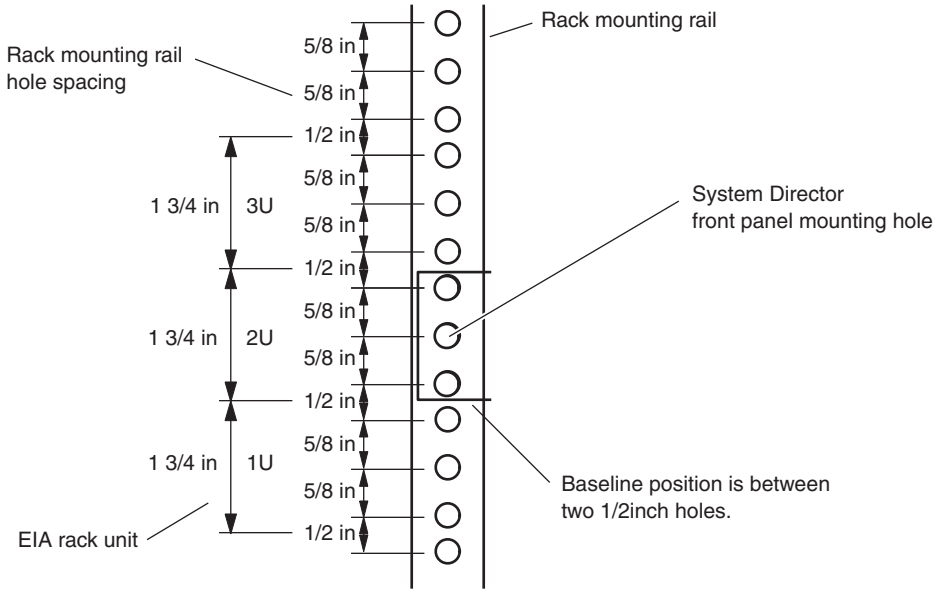
- Inside Enclosure Access — Allow 0.at least 5 in (1.3 cm) clearance on top of the enclosure for cover removal.

גישה לפנים המארז — אם ברצונכם להרחיב את המארז ולהסיר את המכסה העליון, יש להשאיר מרווח של 0.5 אינץ (1.3 ס"מ) בחלק העליון של המארז עבור הסרת המכסה.

Positioning the server in the Rack

- Select a position in the rack where the File Gateway server is at the proper baseline position.

Positioning the File Gateway Server



Separating the Slide Rails

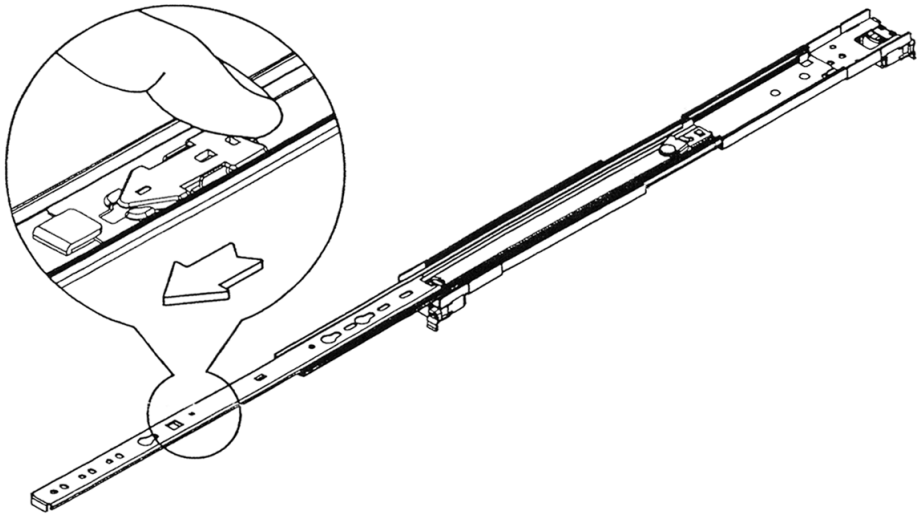
Separate the slide rails and attach the inner “movable” section to the File Gateway server and the outer “fixed” section to the rack rails.

To separate the slide rails:

1. Slide the slide rail completely open.
2. Press the spring clip on the inner slide rail as shown in the illustration.

The spring clip is shown in the closeup in the following figure.

Separating the Slide Rails



3. Pull and separate the two halves.
4. Repeat these steps to separate the second slide rail.

Attaching Inner Slide Rails to the File Gateway Server

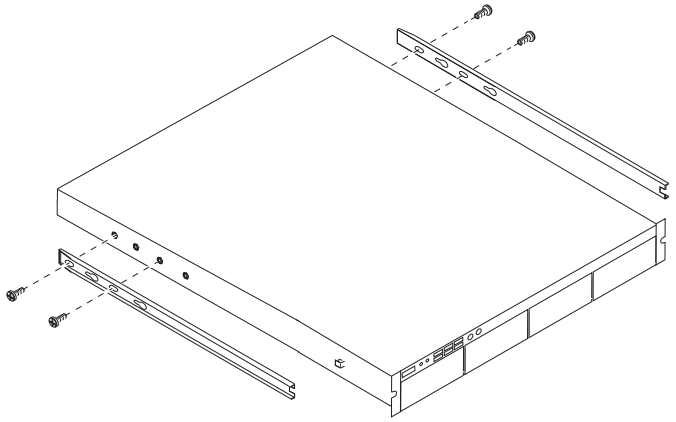
Attach the inner slide rails that were separated from the outer slide rails to the File Gateway server.

To attach the inner slide rails:

1. Position the inner slide rail against the side of the server so that the screw holes are toward the rear of the server, and the front of the slide rail fits over the tab at the front of the server.
2. Secure the inner slide rail to the server with two of the small screws.

The rail kit might contain more screws than needed.

Attaching the Inner Slide Rails



3. Repeat this procedure to attach the other inner slide rail on the other side of the server.

Attaching the Outer Rails to a Square-Hole Rack

If your mounting rails have round holes, see “Attaching the Outer Rails to a Round-Hole Rack” on page 24.

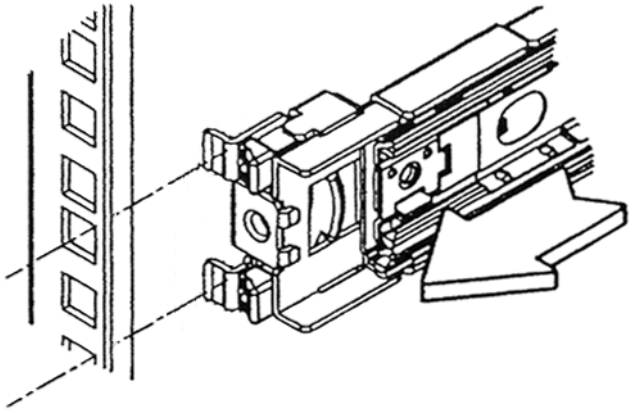
To attach the outer slide rails to the rack with square holes:

1. Align the outer slide rail bracket assembly with the front rack-mounding holes.

Have someone help you hold the slide rails level while you are positioning them in the rack.

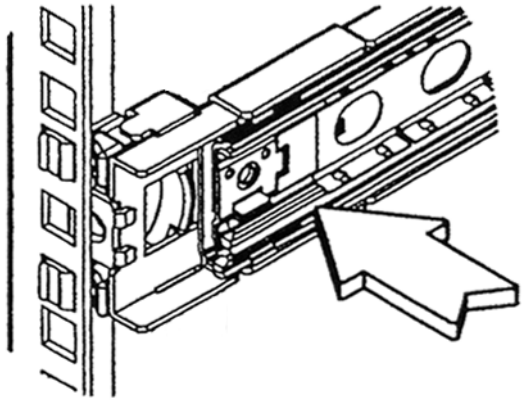
2. Slide the square tabs through the holes in the front, vertical rack-mounting rail.

Positioning the Outer Slide Rail with the Front Rack-Mounting Rail



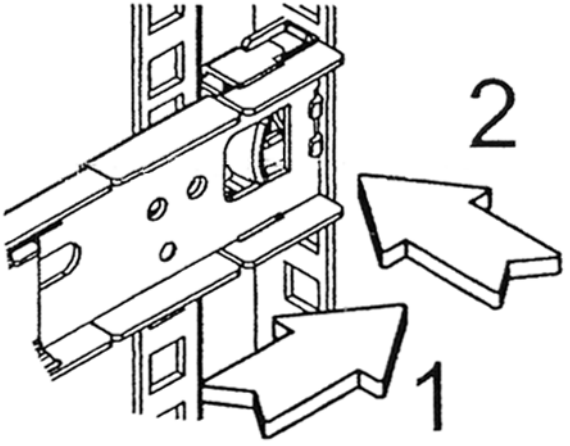
3. Push the outer rail towards the outside of the rack, to secure the outer rail in place

Insert the Outer Slide Rail to the Front Rack-Mounting Rail



4. Adjust the outer slide rail bracket assembly to the rear mounting rail.
5. Secure the rear outer slide rail bracket assembly to the rear mounting rail as you did for the front rack-mounting rail.

Securing the Outer Slide Rail to the Rear Rack-Mounting Rail



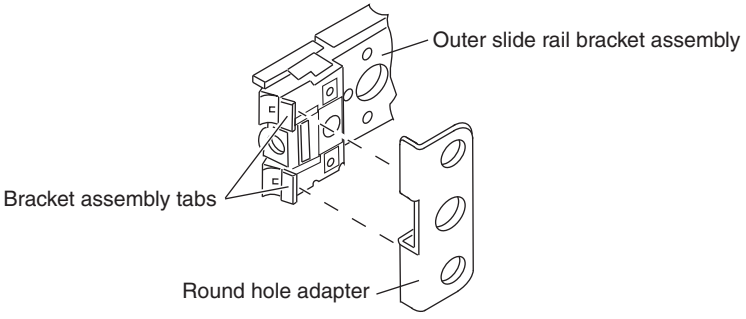
6. Repeat this procedure to attach the second outer slide rail on the other side of the rack.

Attaching the Outer Rails to a Round-Hole Rack

To attach the outer slide rails to the rack with round holes:

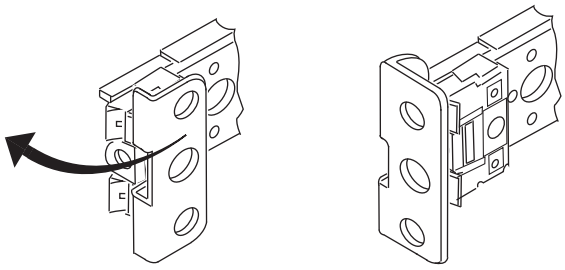
1. Locate the four round hole adapters (in the accessory kit's plastic bag, not in the rack mount kit box) and position the adapter on the end of the outer slide rail bracket assembly as shown in the following illustration.

Attaching the Round Hole Adapter to the Bracket Assembly



2. With the bracket assembly tabs aligning with the cut-out in the round hole adapter, swing the adapter so that the holes face the front of the bracket assemble as shown in the following illustration.

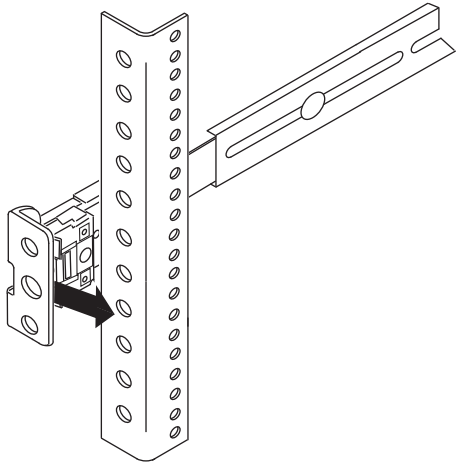
Positioning the Round Hole Adapter



3. Slide the outer slide rail bracket assembly onto the side rack-mounting rail so that the round hole adapter is over the rack rail.

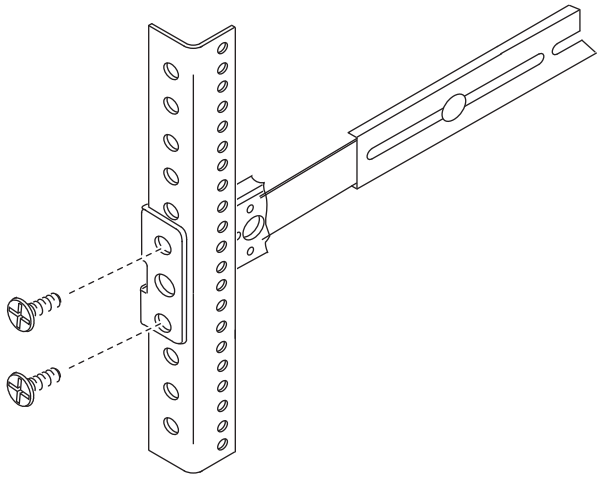
Have someone help you hold the slide rails level while you are positioning them in the rack.

Insert the Outer Slide Rail to the Front Rack-Mounting Rail



4. Insert the small (10-32) Phillips-head screws through the round-hole adapter and mounting rail, into the bracket. If the rack holes are different size, you must supply your own screws.

Securing the Outer Slide Rail to the Rack-Mounting Rail



5. Adjust the outer slide rail bracket assembly to the rear mounting rail.
6. Secure the rear outer slide rail bracket assembly to the rear mounting rail as you did for the front rack-mounting rail.
7. Repeat this procedure to attach the second outer slide rail on the other side of the rack.

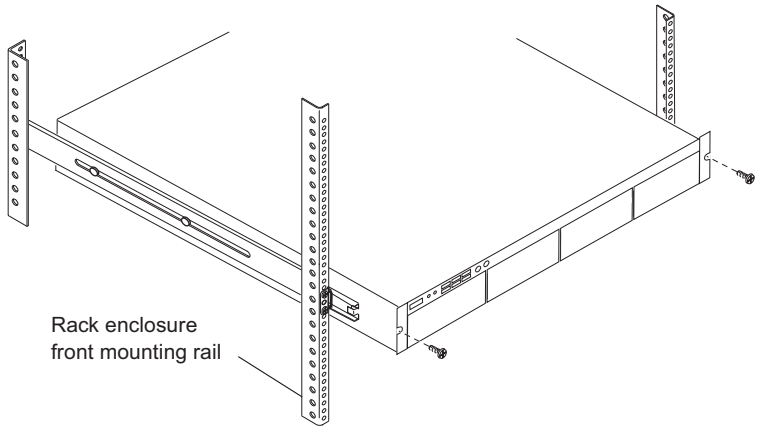
Securing the File Gateway Server in a Rack

Have someone help you lift the File Gateway server while you are positioning it into the slide rails.

To secure the server to the rack enclosure:

1. Lift and position the server so that the inner slide rails (secured to the File Gateway server) are aligned with the outer slide rails secured to the rack.
2. Push the front of the File Gateway server flush against the front mounting rail. The holes in the server front panel align with the holes in the front mounting rail.
3. From the front of the rack enclosure, insert the large Phillips-head screw through the File Gateway server and front mounting rail.
   - Square hole racks — Use the middle hole of the outer rail kit to secure the server front panel to the vertical rail. An M6x10 screw is included in the parts kit to secure the front panel.
   - Round hole racks — Attach the server front panel to the vertical rail of the rack. Use a truss head screw or hardware that comes with your rack to secure the front panel.

Front Panel Screws



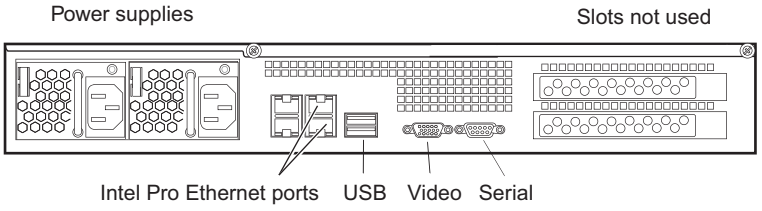
Keyboard, Monitor, and Mouse Connections

Use an industry standard USB keyboard, USB mouse and VGA monitor to access the File Gateway Server. You can optionally use a KVM switch if several servers are installed in the rack. The keyboard, monitor, and mouse connections use the ports described in the following procedure. Follow the instructions supplied with your KVM switch. You must supply KVM cables that are compatible with your KVM switch.

There are only two USB ports on the rear of the File Gateway server. One of the ports is typically used for the application key. When you purchase your KVM switch make sure it includes a USB splitter cable so that both your keyboard and mouse can plug into the splitter cable and use a single USB port on the Engine.

The following figure shows the rear panel of the File Gateway server and the connections used during the setup.

File Gateway Server USB and Monitor Ports



To connect a keyboard, monitor, and mouse to the Avid ISIS:

1. Install your KVM switch in a suitable slot next to the File Gateway server in the rack.

   You can also place the monitor on a shelf, and the keyboard and mouse on a sliding tray in the rack. These items are optional and can be purchased locally or from Avid.

Do not place the monitor on top of the Avid ISIS.

2. Attach the VGA connector on the monitor cable to the 15-pin video port on the back of the Avid ISIS. Secure the connector with the thumbscrews on the connector. For exact locations see “Network Connection” on page 28.
3. Insert the connector on the keyboard and mouse cables into a USB splitter cable.

If you do not have a USB splitter cable, plug your keyboard and mouse cables directly into the USB ports on the rear of the File Gateway server.

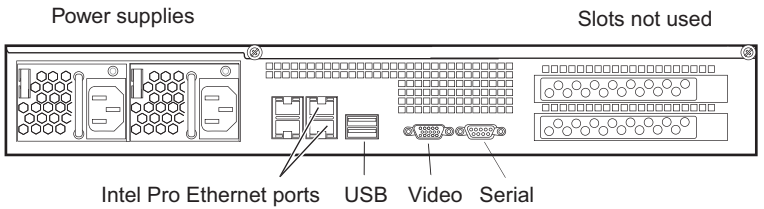
4. Insert the other end of the USB splitter cable into a USB connector on the back of the File Gateway server.

Network Connection

Before you attempt to define the IP addressing for your File Gateway and configure the static internal IP addresses, make sure you understand how the addresses are assigned within the ISIS environment.

Connect the two (Intel Pro 1000) Ethernet ports on the right side of the File Gateway to the Zone 2 switch using a CAT5 E, CAT6 cable or better. For a list of cables qualified with the Avid ISIS system, see “Supported Cabling” on page 63.

File Gateway Server Ethernet Ports



The server setup is summarized as follows:

1. Configure the IP addresses for the File Gateway server.

The ghost image on the File Gateway servers does not set the IP addresses of the two onboard network ports; the system is set for DHCP.

2. Load the File Gateway:
   - To install and configure the CIFS software, see "Configuring the Server for CIFS Access" on page 35.
   - To install and configure FTP, use the Windows Creation Wizard. See "Configuring the Server for FTP Access" on page 49.

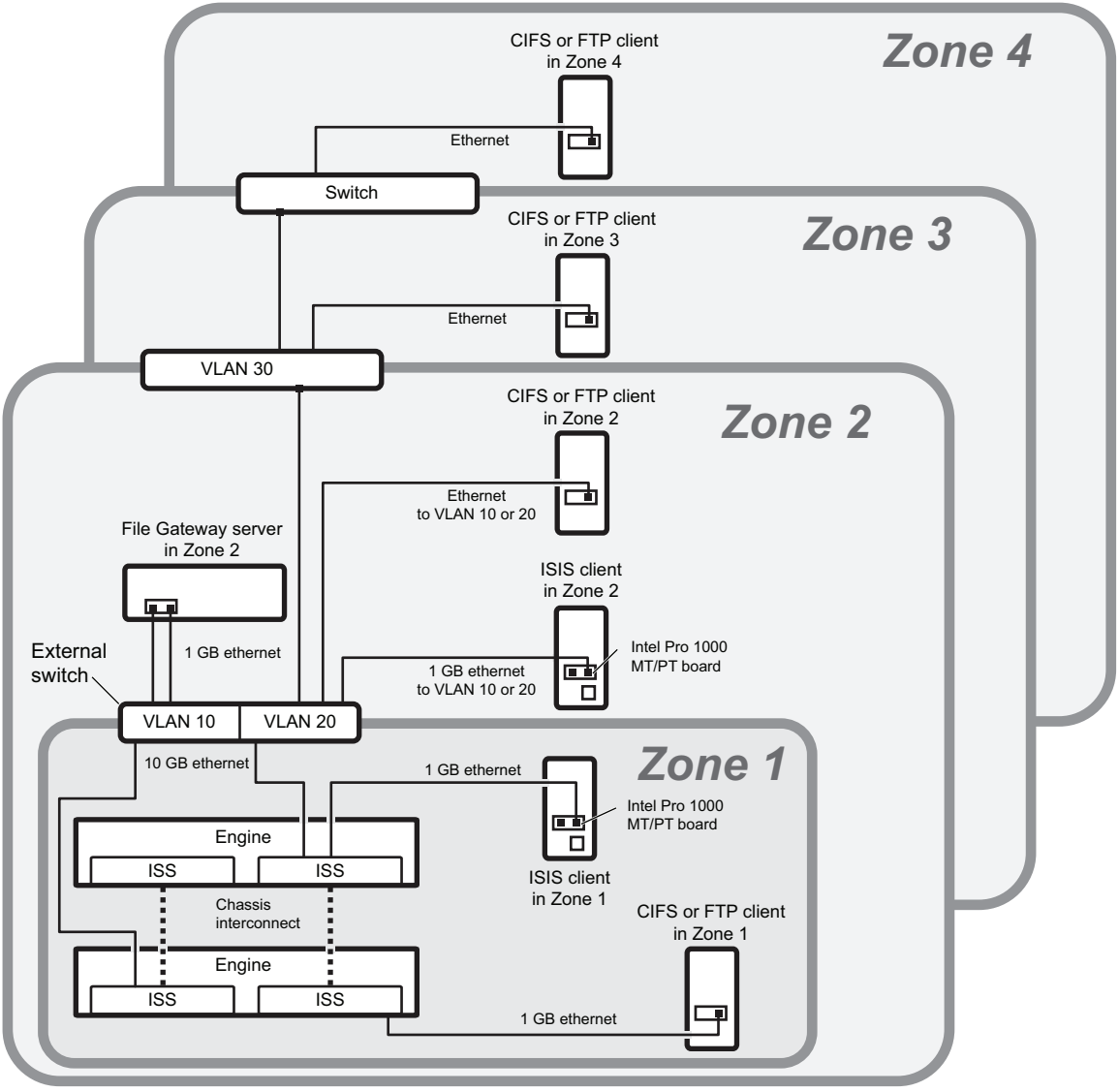
ISIS | 7500 Configurations

A Zone 2 (indirect connect) configuration consists of a group of clients connected to an Ethernet switch with a 10 Gb port connected to an ISS located in the Engine. Both Ethernet ports on the File Gateway server connect to *one* subnet via the Zone 2 switch using a 1 Gb port. CIFS and FTP clients can also use 10BaseT and 100BaseT connections.

Connecting the File Gateway server to the Zone 2 switch allows the CIFS and FTP traffic to completely bypass the ISIS client traffic. If the File Gateway server is directly connected as a Zone 1 client, then CIFS, FTP, and ISIS traffic all goes through ISIS, effectively doubling the ISIS bandwidth usage.

The following is an ISIS | 7500 zone configuration diagram showing CIFS and FTP clients in Zone 1, Zone 2, Zone 3, and Zone 4. Although all zones are supported, Avid recommends you do not connect CIFS or FTP clients in Zone 1, as they can unnecessarily use bandwidth that the ISIS clients need.

Avid ISIS | 7500 File Gateway Network Configuration

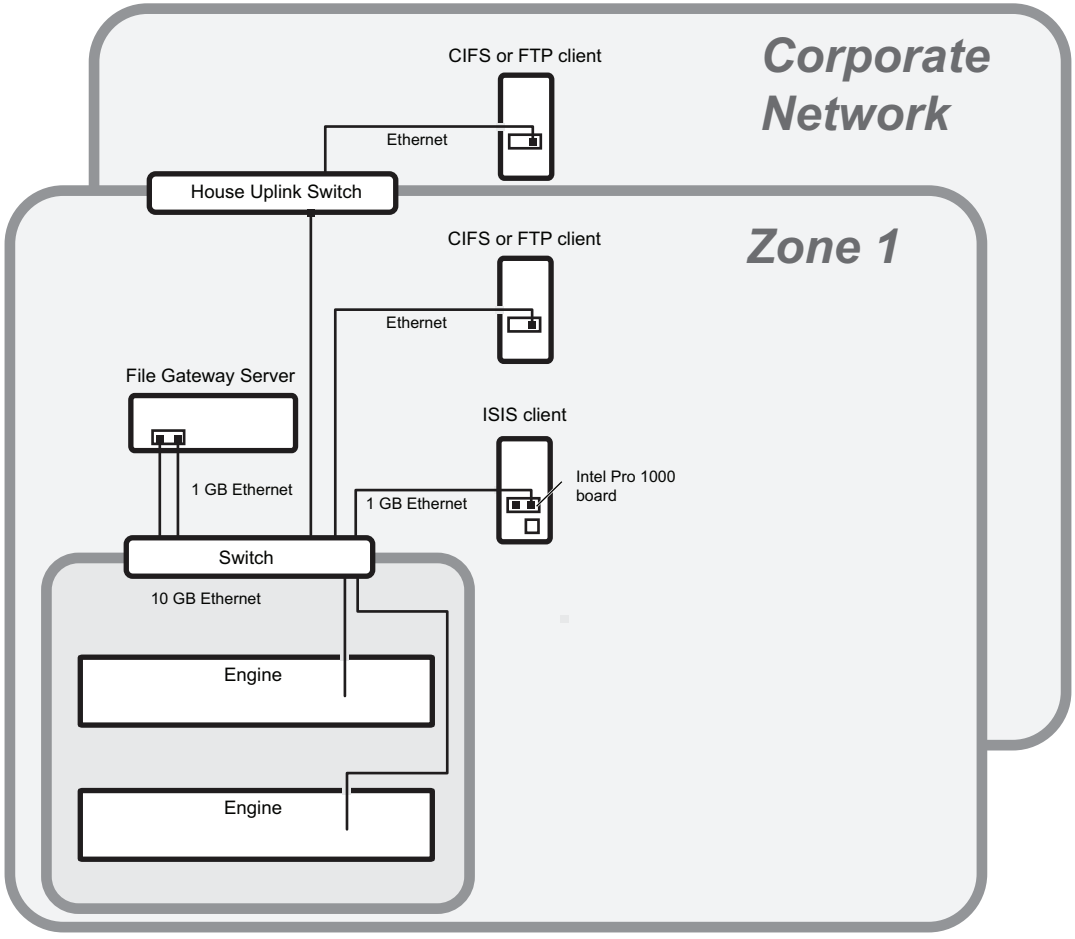


ISIS | 5500 Configurations

The ISIS | 5500 configuration consists of a 10 Gb connection from the Engine to an ISIS switch providing support for ISIS, CIFS, and FTP clients. Two Ethernet ports on the File Gateway server connect to 1 Gb ports on the switch. CIFS and FTP clients can use 1 Gb, 10BaseT, or 100BaseT connections to the ISIS switch or corporate network switch.

The following is an ISIS | 5500 zone configuration diagram showing CIFS and FTP clients in Zone 1 and the Corporate Network. Avid recommends you do not connect CIFS or FTP clients in Zone 1, as they can unnecessarily use bandwidth that the ISIS clients need.

Avid ISIS | 5500 File Gateway Network Configuration



Setting Up Separate Network Traffic

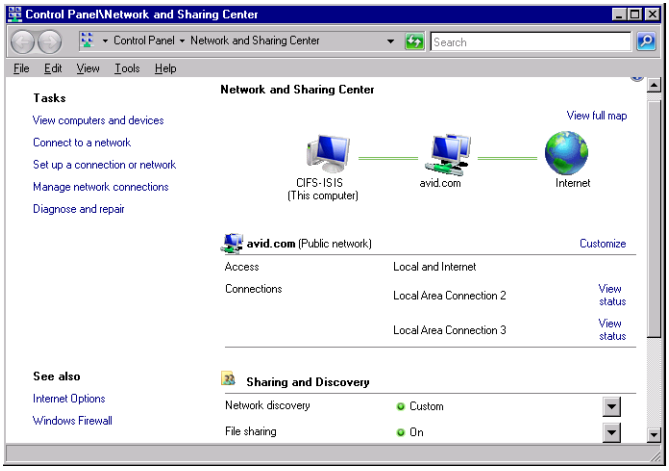
The File Gateway server uses the built-in Ethernet ports on the back of the server. Each port is dedicated to specific network traffic. Avid recommends you rename these ports so they can be easily identified as ISIS Traffic and CIFS_FTP Traffic. Both these network ports require static IP addresses (no DHCP). The ISIS Traffic port requires a setting change.

The following procedure describes how to rename and configure the File Gateway server ports on the Avid ISIS shared storage network for dedicated ISIS and CIFS_FTP Traffic. Both server network ports are connected to the Zone 2 switch.

To set up separate network traffic:

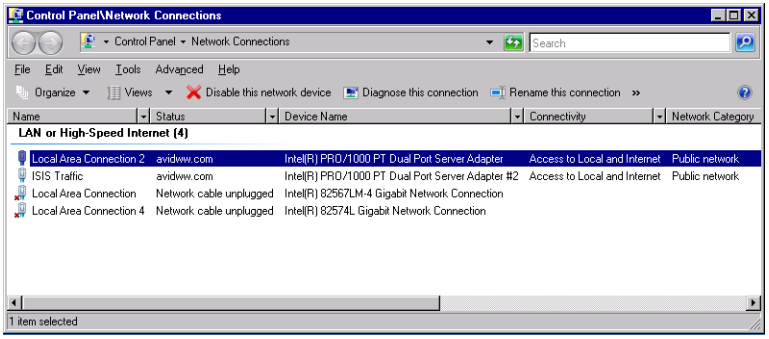
1. Right-click the Network icon on the Desktop and select Properties.

   The Control Panel/Network and Sharing Center window opens.



2. Click “Manage network connections.” on the left side of the window.

   The Control Panel/Network Connections window opens.


Control Panel\Network Connections
Control Panel ▸ Network Connections
Search
File Edit View Tools Advanced Help
Organize
Views
Disable this network device
Diagnose this connection
Rename this connection
Name
Status
Device Name
Connectivity
Network Category
LAN or High-Speed Internet (4)
Local Area Connection 2 avidww.com Intel(R) PRO/1000 PT Dual Port Server Adapter Access to Local and Internet Public network
ISIS Traffic avidww.com Intel(R) PRO/1000 PT Dual Port Server Adapter #2 Access to Local and Internet Public network
Local Area Connection Network cable unplugged Intel(R) 82567LM-4 Gigabit Network Connection
Local Area Connection 4 Network cable unplugged Intel(R) 82574L Gigabit Network Connection
1 item selected

3. Right-click Local Area Connect 2 and select Rename.
4. Rename the connection to CIFS_FTP Traffic.

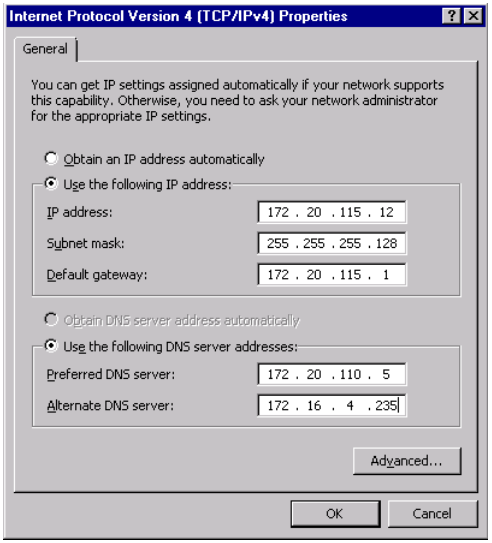
5. Right-click the CIFS_FTP Traffic connection and select Properties.
   a. In the Properties dialog box, double-click Internet Protocol version 4 (TCP/IPv4).
   b. Select “Use the following IP address:” and enter the following:
      — An IP address (172.20.115.12 used in the following example)
      — A subnet mask (255.255.255.128 used in the following example)
      — A default gateway (172.20.115.1 used in the following example)
   c. Select “Use the following DNS server addresses:” and enter the following:
      — Preferred DNS server (172.20.110.5 used in the following example)
      — Alternate DNS server (172.16.4.235 used in the following example)
   d. Click OK.
6. Right-click Local Area Connect 3 and select Rename.
7. Rename the connection to ISIS Traffic.
8. Right-click the ISIS Traffic connection and select Properties.
   a. In the Properties dialog box, double-click Internet Protocol version 4 (TCP/IPv4).
   b. Select “Use the following IP address:” and enter the following:
      — An IP address (172.20.115.13 used in the following example)
      — A subnet mask (255.255.255.255 used in the following example)
      — No default gateway
   c. Select “Use the following DNS server addresses:” and enter the following:
      — Preferred DNS server (172.20.110.5 used in the following example)
      — Alternate DNS server (172.16.4.235 used in the following example)
   d. Click OK.
9. Deselect “File and Printer Sharing for Microsoft Networks.”
10. Click OK to save the change and close the Properties dialog box.
11. Right-click the CIFS_FTP Traffic connection and select Properties.
12. Verify that “File and Printer Sharing for Microsoft Networks” is selected for the CIFS_FTP Traffic connection.

File Gateway Server Settings for CIFS, FTP, and ISIS Traffic

Configure the following for the CIFS and FTP Ethernet port on the File Gateway server:

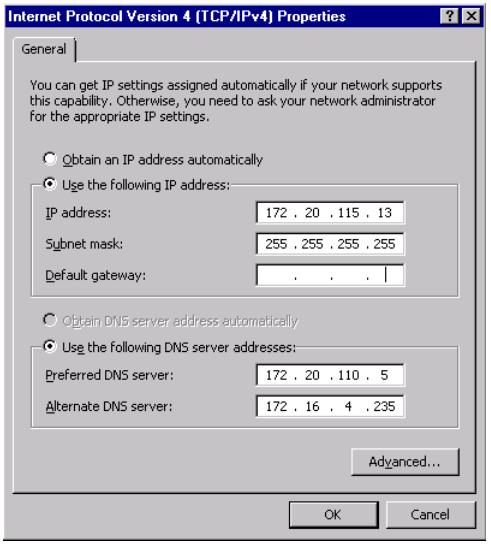
CIFS and FTP Traffic

- Default gateway
- Primary network port (top of binding order)
- Unique DNS hostname
- Name (for example, FileGW-cifs.avid-lab.com)
- IP address


Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 172 . 20 . 115 . 12
Subnet mask: 255 . 255 . 255 . 128
Default gateway: 172 . 20 . 115 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server: 172 . 20 . 110 . 5
Alternate DNS server: 172 . 16 . 4 . 235
Advanced...
OK
Cancel

ISIS Traffic

- No default gateway
- Unique DNS hostname
- Name (for example, FileGW-isis.avid-lab.com)
- IP address


Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 172 . 20 . 115 . 13
Subnet mask: 255 . 255 . 255 . 255
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server: 172 . 20 . 110 . 5
Alternate DNS server: 172 . 16 . 4 . 235
Advanced...
OK
Cancel

3 Configuring the Server for CIFS Access

This chapter describes how to configure the File Gateway to use Common Internet File System (CIFS) and other Avid ISIS shared storage hardware. The ISIS and CIFS clients share traffic on the same network port on the back of the server.

CIFS Server Software

The File Gateway runs on a separate server in ISIS | 7500 and ISIS | 5500 environments, but runs on the System Director in an ISIS | 2500 environment.

In ISIS | 2500 systems, only System Directors with a 10 Gb connection to the switch support CIFS clients. The recommended bandwidth setting is 100 MB/s so that there is little impact to ISIS clients.

If you have previously disabled the CIFS service because of a 1 Gb connection with the System Director, start the CIFS service again. See "Checking The File Gateway Service" on page 38.

For ISIS | 7500 and ISIS | 5500, set up your File Gateway server in your Avid ISIS network before installing the software. For instructions on renaming the network ports see "Setting Up Separate Network Traffic" on page 31.

Many Windows critical updates have already been applied in the image on the Avid ISIS File Gateway server or System Director. Do not turn on automatic updates. Manually apply only the updates that have been approved by Avid. For approved Windows updates, access the Knowledge Base at www.avid.com/securityupdate and review the Microsoft Security Bulletin Addendum document.

The ISIS client software is required on the File Gateway server (ISIS | 7500 and ISIS | 5500) or System Director (ISIS | 2500) and should be installed before the File Gateway server software. When the File Gateway server software is installed, the installer automatically removes the Client Manager entry from the Start > Programs > Startup menu.

Do not start the Client Manager while the File Gateway server software is running. If you need to access the Client Manager close the application when you are finished.

Loading the Software

The Avid ISIS software is loaded onto the system using a USB flash drive. The system ships with two USB flash drives:

- The 8 GB USB drive is blank, for you to download the Avid ISIS software.
- The 16 GB USB flash drive contains the Avid ISIS Product Recovery image.

To load the Avid ISIS software:

1. Log in to the Avid ISIS File Gateway as Administrator (default password: **`is-admin`**).
2. Make a folder for the software kit on your root directory (C:\) of your File Gateway server.
3. Insert the 4 GB USB flash drive (with software kit) into any of USB ports on your File Gateway server.

You can run the software installer from the USB flash drive, or copy the software kit to the Avid ISIS for easy access to kit files if you need them in the future.

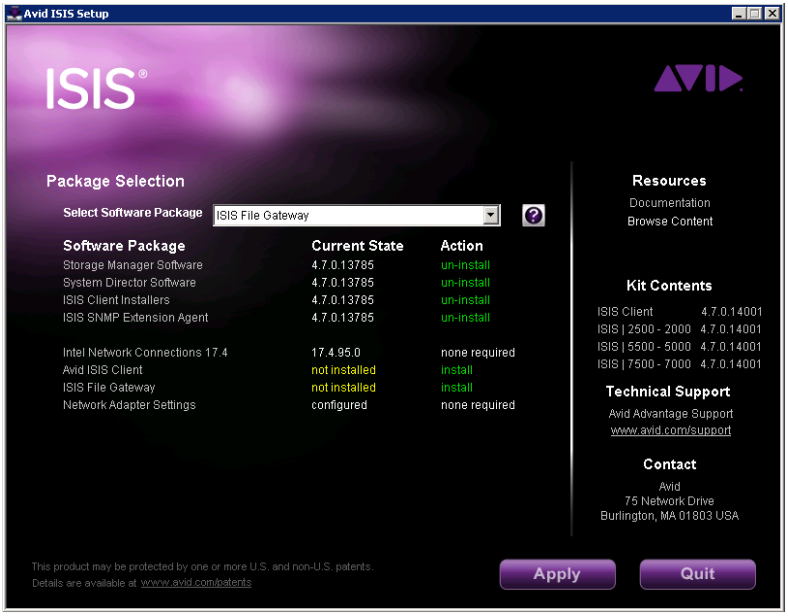
   If the USB flash drive does not automatically display:

   a. Double-click the computer icon on the desktop.

   b. Double-click the USB flash drive icon in the window and copy the software kit into the new folder you created on the Avid ISIS system.

4. (Option) The Avid ISIS software kit is also available on the Avid Download Center (www.avid.com/support/downloads) with a valid login account. You can create an account if you do not have one. Uncompress (unzip) the downloaded software kit in the new folder on the Avid ISIS system.
5. Double-click the AvidISISSetup.exe file in the software kit.

   The installer splash screen appears.



Avid highly recommends that you click the Documentation link and open the ReadMe (PDF) file. The ReadMe file provides the latest information regarding the Avid ISIS system. You must have Adobe Reader installed to view the PDF.

6. Select ISIS File Gateway from the “Select Software Package” menu.

In an ISIS | 7500 or ISIS | 5500 environment, you cannot install the File Gateway software on the same server as the System Director software.

7. Click Apply.
8. Follow the screen prompts accepting the defaults and License agreement.
9. Once the installation is complete, click Finish.
10. Restart the File Gateway.

Restarting the File Gateway server does not restart the Client Manager software. This is not the typical Client Manager software behavior. This change in behavior is set in the ISIS File Gateway software.

Intel Pro 1000 Network Adapter Settings

The AvidISISSetup.exe file configures the Intel Pro 1000 network adapter correctly for the ISIS environment; you do not need to make any adjustments. For reference, the installer sets the adapter as follows:

Intel Adapter Setting	ISIS | 2500 and ISIS 2000	ISIS | 5500 and ISIS 5000	ISIS | 7500 and ISIS 7000	ISIS File Gateway
Flow Control	Disabled	Enabled	Disabled	Disabled
Interrupt Moderation	Disabled	Disabled	Disabled	Disabled
interrupt Moderation Rate	OFF	OFF	OFF	OFF
Receive Descriptors	1024	1024	1024	1024
Transmit Descriptors	1024	1024	1024	1024

Checking The File Gateway Service

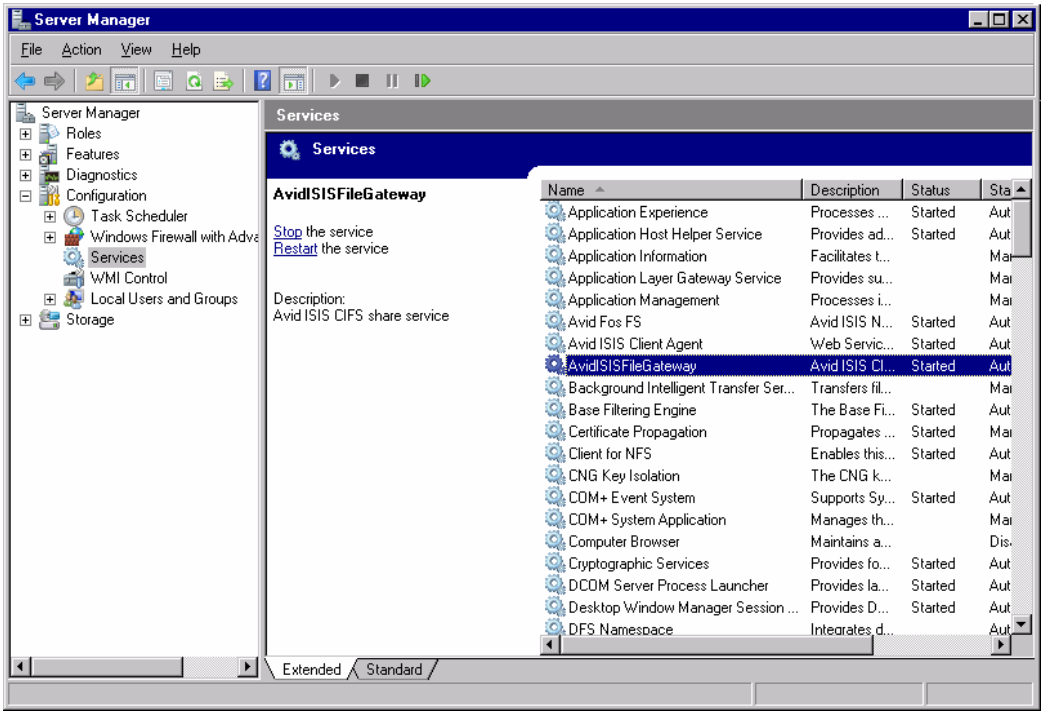
After loading the Avid ISIS File Gateway software the Avid ISIS File Gateway is automatically started when you restart the File Gateway server (ISIS | 7500 and ISIS | 5500) or the System Director (ISIS | 2500). There is no need to access the service but if you want to check or change the state of the service, do the following.

To start and stop your CIFS service:

1. Right-click the *My Computer* icon and select Manage.

   The Server Manager window opens.

2. Expand the Configuration menu in the left pane and select Services.
3. Right-click AvidISISFileGateway in the right pane and select Start or Stop.



Setting the Client Manager Preference

Set up the Client Manager for separate ISIS and CIFS_FTP Traffic in the Client Manager Preferences.

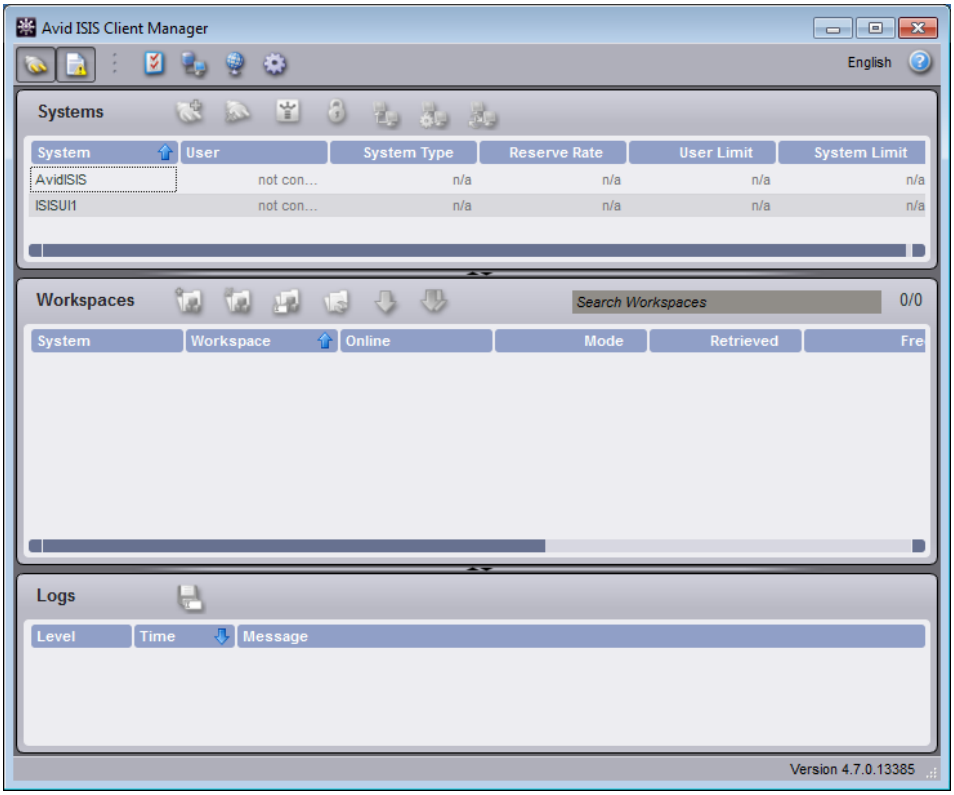
Whenever the File Gateway server is restarted the Client Manager software does not automatically restart. This is not the typical Client Manager software behavior. This change in behavior is set in the ISIS File Gateway software (AvidISISFileGatewayx64).

To set the Client Manager preferences:

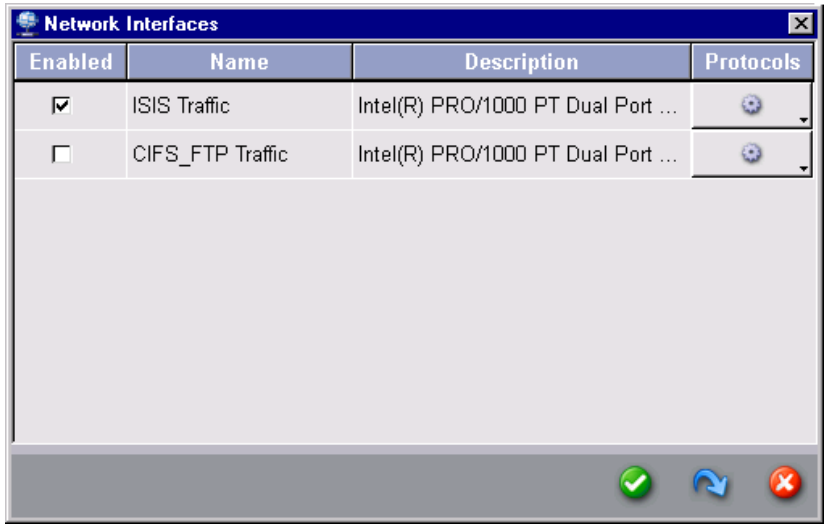
1. Start Client Manager by doing one of the following:

   - Click the Client Manager icon in the Windows taskbar
   - Click Start > Programs > Avid > ISIS Client > ISIS Client Manager

   The ISIS Client Manager opens.



2. Click the Network Interface Setting button and the Network Interfaces window opens.
3. Click Network and deselect the CIFS_FTP Traffic port.



Only the Ethernet ports designated for ISIS traffic must be checked. Uncheck the other network ports.

4. Click Apply.
5. Do both of the following:
   a. Close the Client Manager Window. This does not stop the Client Manager service.

      When the Client Manager is running, an icon appears in the Windows system tray. The Client Manager GUI cannot be running on the File Gateway server. You must quit the application.

   b. Right-click the Client Manager icon in the Windows taskbar and select Quit.

Creating Windows Users and User Groups on the File Gateway Server

You must add Windows users and user groups to the Avid ISIS File Gateway server (ISIS | 7500 and ISIS | 5500) or System Director (ISIS | 2500) using the standard Windows 2008 operating system process. The following procedures are provided to help with that process, but for details on creating user and group accounts:

- On the File Gateway server (ISIS | 7500 and ISIS | 5500), right-click the Local Users and Groups folder in the left pane of the Computer Management window and select Help.
- On the System Director (ISIS | 2500), right-click on the Local Users and Groups folder in the left pane of the Computer Management window and select Help.

Restrictions for user names:

- If a user name contains a space, the part of the name after the space will not be displayed in the User List after you save the configuration. Avid recommends not using spaces in user names.
- The File Gateway does not support user names that contain any non-ASCII characters (including Asian and diacritical characters). An error occurs on the client indicating you have an incorrect URL.

To create a local user account:

1. Right-click My Computer and select Manage.

   The Computer Management Window opens.
2. Expand the “Local Users and Groups” folder in the left pane.
3. Click Users.
4. Click Action > New User.
5. Type the appropriate information in the dialog box.
6. Select or clear the appropriate check boxes:
   - User must change password at next logon
   - User cannot change password
   - Password never expires
   - Account is disabled
7. Click Create, and then click Close.

To create a local group:

1. Right-click My Computer and select Manage.

   The Computer Management Window opens.
2. Expand the “Local Users and Groups” folder in the left pane.
3. Click Groups.
4. Click Action > New Group from the menu bar.
5. In Group name, type a name for the new group.
6. In Description, type a description of the new group.
7. To add one or more members to the new group, click Add.
8. In the Select Users, Computers, or Groups dialog box, under “Enter the object names to select,” type the name of the user account or group account that you want to add, and then click OK.
9. In the New Group dialog box, click Create, and then click Close.

Adding Users and Setting Permissions

The ISIS File Gateway software includes an application called the Configuration Editor that allows the File Gateway administrator to create a configuration file listing the authorized users with permission to specific workspaces.

As part of configuring users and permissions, you can also change the bandwidth. The default bandwidth for the File Gateway server (ISIS | 7500 and ISIS | 5500) or System Director (ISIS | 2500) when configured for CIFS is 100 MB/s. The File Gateway server or System Director is an ISIS client and all the CIFS users are clients of the CIFS server.

You can define the File Gateway server or System Director bandwidth as follows:

- ISIS | 7500 and ISIS | 5500—40 MB/s to 240 MB/s (the aggregate bandwidth of CIFS and FTP clients cannot exceed 100 MB/s)
- ISIS | 2500—40 MB/s to 1200 MB/s

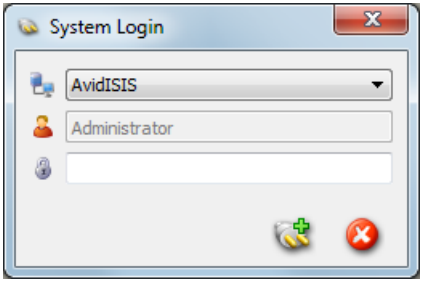
Before adding CIFS users, make sure the users are already Windows users listed on the ISIS File Gateway server; see “Creating Windows Users and User Groups on the File Gateway Server” on page 42.

To add CIFS users and workspaces:

1. On the File Gateway server (ISIS | 7500 and ISIS | 5500) or the System Director (ISIS | 2500), click Start > Programs > Avid > ISIS File Gateway and select Configuration Editor.

   The Configuration Editor window opens.

2. If the System Login dialog box is not displayed, click Connect in the top toolbar of the Configuration Editor window.

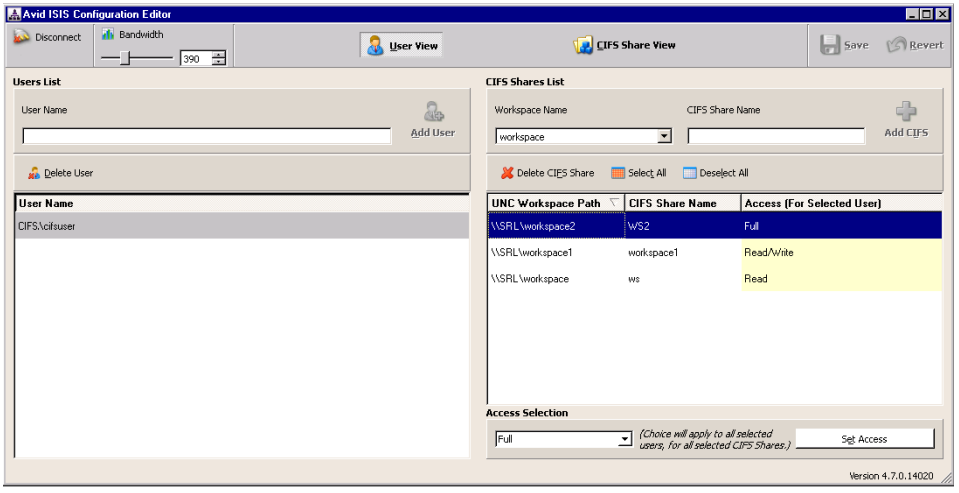


3. In the Configuration Editor, move the Bandwidth slider to the bandwidth speed you want available to the users, or type the value in the text box next to the slider.

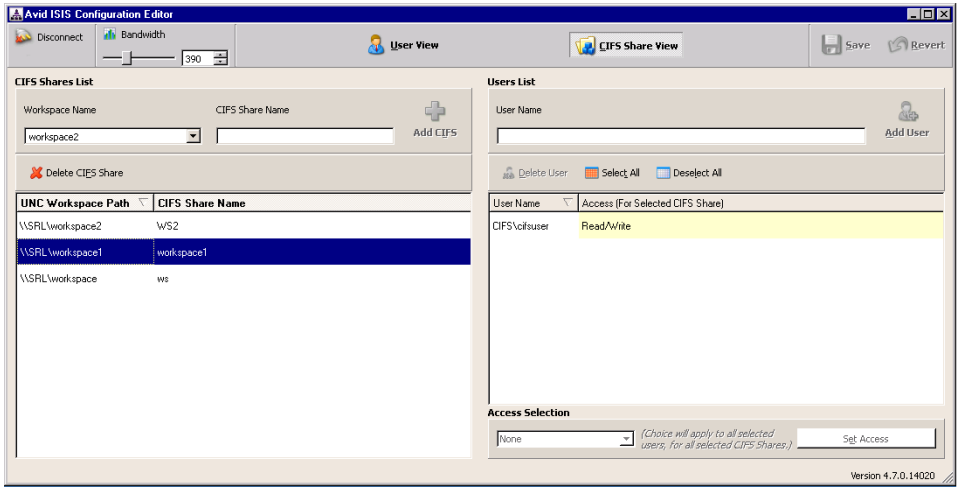
   You cannot set separate bandwidth speeds to individual users.

4. Type the *user_name* in the User Name text box and click Add User.

   The user name must match the Windows user names created on the File Gateway server and System Director.



If the Configuration Editor is set to User View, the User panel is on the left and the CIFS Share panel is on the right. If set to CIFS Share View, the Users panel and CIFS Shares panel switch places, as shown below.



5. With a User Name selected, type or select the name of the workspace you want to be displayed to the client in the Workspace Name text box.
6. In the CIFS Share Name field, enter a name for the shared workspace; it does not have to match the actual workspace name. For example, in the figure above, the CIFS share name WS2 maps to the actual path: \\SRL\workspace2.
7. Click Add CIFS.
8. Continue with "Setting CIFS User Permissions" on page 45.

Setting CIFS User Permissions

You can set permissions for users (to access multiple workspaces), or for workspaces (to make them accessible by multiple users).

To set CIFS user permissions to multiple workspaces:

1. Open the Configuration Editor (if not already open) — Click Start > Programs > Avid > ISIS File Gateway and select Configuration Editor.
2. Select a user in the left pane and one or more workspaces in the right pane.
3. Set the permissions using the Access Selection menu:
   - None — no access
   - Full — read, change, and full control

- Read — read permission
- Read/Write — read and write permission

4. Click Set Access.
5. Click Save.
6. Quit the application.

To make a workspace accessible to multiple users:

1. Open the Configuration Editor (if not already open) — Click Start > Programs > Avid > ISIS File Gateway and select Configuration Editor.
2. Click CIFS Share View.
3. Select a workspace in the left pane and one or more users in the right pane.
4. Set the permissions using the Access Selection menu:
   - None — no access
   - Full — read, change, and full control
   - Read — read permission
   - Read/Write — read and change permission
5. Click Set Access.
6. Repeat steps 3 through 5 until permissions have been set for all workspaces.
7. Click Save.
8. Quit the application.

Mapping Network Workspaces on CIFS Clients

CIFS clients can map multiple network workspaces to their system for a convenient shortcut, like any other network share.

To map a workspace to a CIFS client (Windows):

1. Click Start > Run on the CIFS client.
2. In the Open text box, type the path of the workspace on the corporate domain, for example *FileGateway_server_name**share_name* and click OK.
3. In the Windows Explorer window that opens, click the Tools menu and select “Map Network Drive.”

To map a workspace to a CIFS client (Macintosh):

1. In the Apple menu, click Go > Connect to Server.
2. In the Open text box, type the path of the workspace on the cooperate domain, for example cifs://*FileGateway_server_name*/*share_name* and click Connect.

4 Configuring the Server for FTP Access

This chapter describes how to configure the System Director (ISIS | 2500) or the File Gateway server (ISIS | 7500 and ISIS | 5500) to share Avid ISIS workspaces using File Transfer Protocol (FTP). The FTP functionality is done through Microsoft's Internet Information Services (IIS) and the FTP Service.

In ISIS | 2500 environments, only System Directors with a 10 Gb connection to the switch support FTP clients.

Avid recommends the following FTP client applications:

- Microsoft Expression Web 4
- FileZilla
- Core FTP LE
- SmartFTP Client

For information on configuring Microsoft FTP Server Sites, see http://support.microsoft.com/kb/283679.

About the FTP Server

In an ISIS | 7500 or ISIS | 5500 environment, the separate File Gateway server uses the Ethernet ports on the back of the server. Each port is dedicated to specific network traffic. Avid recommends you rename these ports so they can be easily identified as follows:

- ISIS Traffic
- CIFS_FTP Traffic

The ISIS Traffic port also requires a setting change. You must first set up your File Gateway in your Avid ISIS network before installing the software. For instructions on renaming the network ports, see "Setting Up Separate Network Traffic" on page 31.

In an ISIS | 2500 environment, the same server runs both the System Director and the File Gateway. The System Director shares the ISIS client and CIFS network traffic over the same Ethernet connection to the ISIS switch. The following FTP functions and settings have been preconfigured in the operating system image of the ISIS | 2500 System Director and the software:

- An FTP directory (D:\ftproot) has been created for the alias workspaces
- The "Blade FTP Share" FTP site has been created for upgrading the media drives during software upgrades and providing Client Manager software to ISIS clients. The Blade FTP Share install location is: `C:\Program Files (x86)\Common Files\Avid ISIS Shared\ftp`.

You set the access privileges to the Workspaces when you add the FTP users in the Windows operating system.

When installing Avid ISIS File Gateway and client software on a Windows 64-bit server, make sure you are current with your Windows critical updates. Many Windows critical updates have already been applied in the image on the Avid ISIS File Gateway server. Do not turn on automatic updates. Manually apply only the updates that have been approved by Avid. For the current list, access the Knowledge Base at www.avid.com/securityupdate and review the Microsoft Security Bulletin Addendum document.

The FTP service used in the ISIS File Gateway does not support Microsoft Windows Update number KB2489256. If you have Windows Update set to run automatically, this update will fail. Locate the KB2489256 update in the Windows Update list and set it to hidden so that this update does not appear. To hide updates, right-click the individual update and select hide update.

The Client Manager software provides driver information for the File Gateway server and must be installed before you create the FTP site. The Client Manager can run in the background if you are only using the File Gateway as an FTP server. If you are using the File Gateway as both a CIFS and FTP server, the CIFS installer automatically removes the Client Manager entry from the Windows Startup menu.

The general steps for setting up an FTP server are as follows:

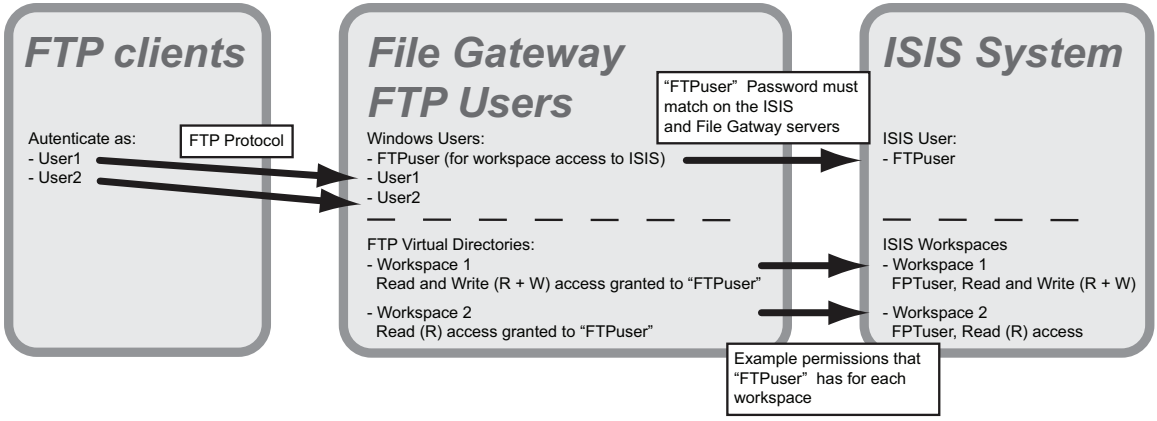
1. Create workspaces to be used for FTP access. See the Avid ISIS Administrator's Guide.
2. Create an ISIS user (for example, "ftpuser") and grant that user Read or Read/Write access to the targeted FTP workspaces according to the access levels needed.

   You must create ISIS FTP users on both the Windows operating system and the ISIS | 2500 System Director using the Management Console. The ISIS client user name and password must match the user name and password on the Windows operating system. For instructions on creating ISIS client users, see the *Avid ISIS Administration Guide*.

You cannot use a blank password for the "ftpuser" account.

3. Create the same user name and password as the ISIS user ("ftpuser") in the Windows User Accounts on the File Gateway server; see "Creating Windows Users and User Groups on the File Gateway Server" on page 56. This is necessary for the Virtual Workspace configuration later.
4. Create additional User Accounts on the File Gateway server (ISIS | 7500 and ISIS | 5500), or the Active Directory Domain Server if this system is in a domain, for FTP client users in order to authenticate and be granted FTP access to the FTP server. Do not use the same user ("ftpuser"), which is specifically for the Virtual Workspace access, for FTP client user accounts; see "Creating Windows Users and User Groups on the File Gateway Server" on page 56
5. Install the File Gateway software. See "Loading the File Gateway Software" on page 51.
6. Create FTP sites. See "Creating FTP Sites" on page 53.

The following block diagram represents how FTP users access workspaces through the File Gateway to the ISIS.



Loading the File Gateway Software

The ISIS system ships with two USB flash drives:

- The 16 GB USB flash drive which includes the Avid ISIS recovery software.
- The blank 8 GB USB flash drive for you to download the Avid ISIS software, including the File Gateway software, to install on your ISIS system. Download the ISIS software from the Avid Download Center (www.avid.com/support/downloads). Uncompress (unzip) the downloaded software kit in the new folder on the Avid ISIS system.

To load the Avid ISIS File Gateway software:

1. Log in to either the File Gateway server (ISIS | 7500 and ISIS | 5500), or the System Director (ISIS | 2500), as Administrator (default password: `is-admin`).

In an ISIS | 7500 or ISIS | 5500 environment, you cannot install the File Gateway software on the same server as the System Director software.

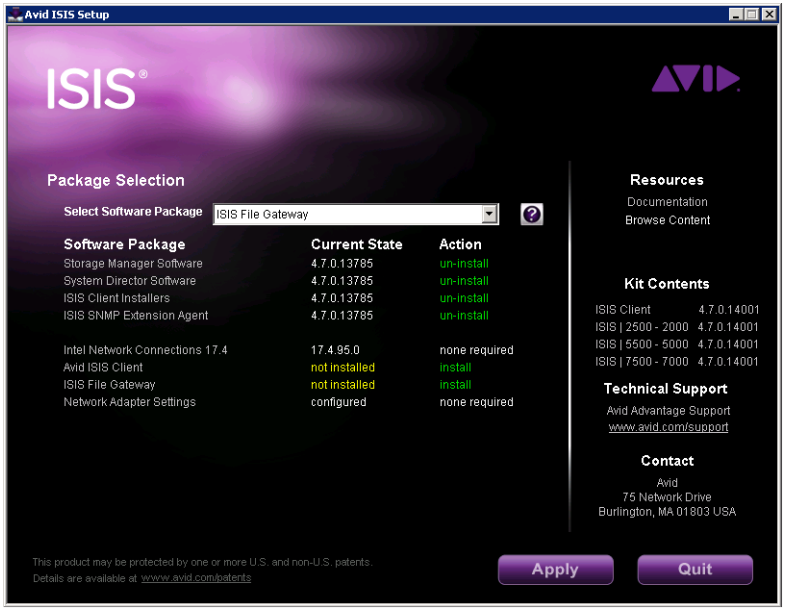
2. Make a folder for the software kit on your root directory (C:\) of your File Gateway server.
3. Insert the USB flash drive (with software kit) into any USB ports on your File Gateway server or System Director.

   If the USB flash drive does not automatically display:

   a. Double-click the computer icon on the desktop.

   b. Double-click the USB flash drive icon in the window and copy the software kit into the new folder you created on the Avid ISIS system.
4. Double-click the AvidISISSetup.exe file in the software kit.

   The installer splash screen appears.



Avid highly recommends that you click the Documentation link and then the ReadMe (PDF) file. The ReadMe file provides the latest information regarding the Avid ISIS system. You must have Adobe Reader installed to view the PDF.

5. Select ISIS File Gateway from the “Select Software Package” menu.
6. Click Apply.
7. Follow the screen prompts accepting the defaults and License agreement.
8. Once the installation is complete, click Finish.
9. Restart the File Gateway.

Whenever the File Gateway server is restarted the Client Manager software does not automatically restart. This is not the typical Client Manager software behavior. This change in behavior is set in the ISIS File Gateway software.

Creating FTP Sites

Whether the File Gateway is running on a separate server or on the System director, you must make sure the ISIS FTP site is running, and the default FTP is not. You must also create additional FTP sites for the workspaces you want to share. The way you get to the FTP Site Creation Wizard varies depending on the operating system.

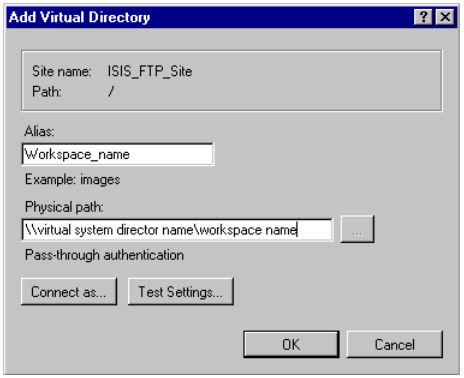
To create FTP sites on Windows Storage Server 2008 R2:

1. Right-click My Computer and select Manage. The Server Manager window opens.
2. Expand Roles.
3. Expand Web Server (IIS).
4. Expand Internet Information Services (IIS) Manager.
5. Expand the host name.
6. Expand Sites.
7. Make sure the ISIS FTP Site is started. If not, right-click it and select Manage FTP Site > Start.

Do not modify any settings in the “Blade FTP Share” FTP Site, or its sub-folders. Any changes to the Blade FTP Share could potentially prevent upgrades and client installers from working properly.

8. Right-click the ISIS FTP Site and select Add Virtual Directory.
   a. In the Alias field, enter the Alias name of the workspace; for example, my_workspace.
   b. In the Physical path field, enter the network path to the workspace; for example, \\virtual_sysdir_name\my_workspace.

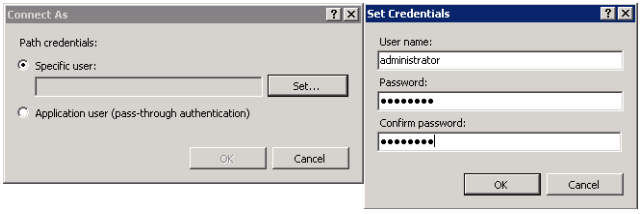
      For consistency and simplicity, Avid recommends that the workspace name match the alias name.



c. Click Connect as.

d. In the Connect As dialog box, select Specify user and click Set.

The Set Credentials dialog box opens.



e. Type **`administrator`** in the User Name text box and the *administrator password* in the Password text box.

f. Re-type the *administrator password* in the Confirm password text box and click OK.

g. Click OK.

The Virtual Directory wizard completes and the newly created Virtual Directory is displayed in the Server Manager window under Services and Applications > Internet Information Services (IIS) Manager > FTP Sites > *virtual_name* > *workspace_name*.

Creating a Virtual Host Name

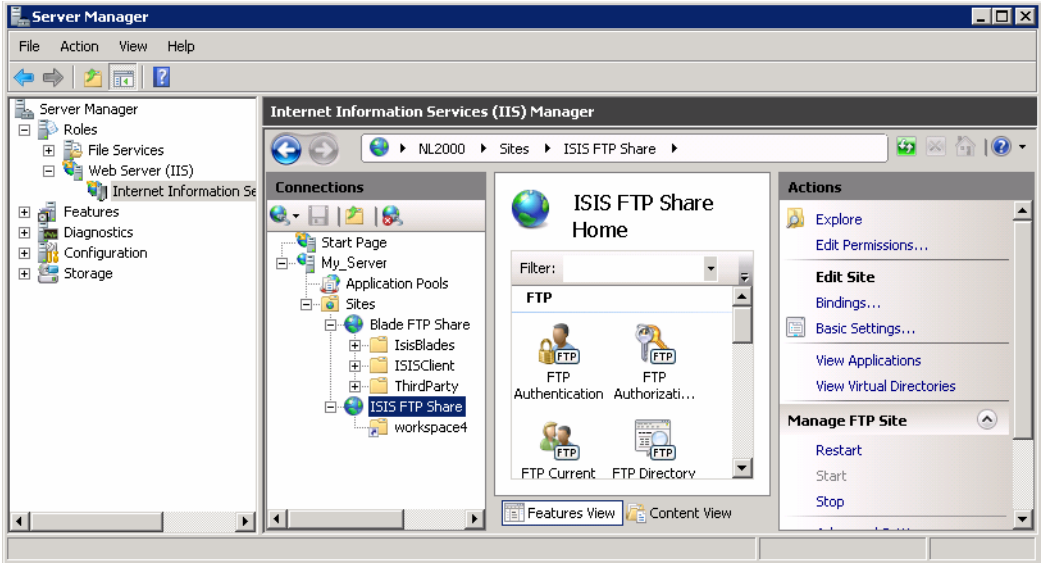
Port 21 is a shared port between the ISIS FTP Share and the Blade FTP Share. A virtual host name must be created using a different name than the actual host name (an alias name is required). The following procedure describes how to create an virtual name.

To create a virtual host name using the FTP Site Bindings:

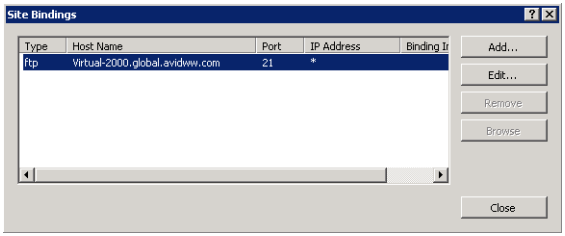
1. On the File Gateway server or the System Director, right-click *My Computer* and select Manage.

   The Server Manager window opens.

2. In the left pane of the Service Manager window, click the plus sign (+) to expand the Roles > Web Server (IIS) > Internet Information Services (IIS) Manager.



3. In the Connections pane, click the plus sign (+) to expand your *System Director name* > Sites > and select ISIS FTP Share.
4. In the Actions pane, click Bindings.
5. In the Site Bindings window, select the FTP entry and click Edit.



6. Enter a virtual host name in Host name text box.

This hostname must not match the actual hostname of the System Director. It must be unique in order to share port 21 and not conflict with the Blade FTP Site. Avid highly recommends you keep the Port setting and IP Address as is.

7. Click OK.
8. Click Close.

Creating Windows Users and User Groups on the File Gateway Server

You must add Windows users and user groups to the Avid ISIS File Gateway server using the standard Windows operating system process. The following procedures are provided to help with that process, but for details on creating user and group accounts on the File Gateway server, right-click the Local Users and Groups folder in the left pane of the Computer Management window and select Help.

To create a local user account:

1. Right-click *My Computer* and select Manage.

   The Server Manager window opens.
2. Expand Configuration and the “Local Users and Groups” folder in the left pane.
3. Click Users.
4. From the Action menu, click New User.
5. Type the appropriate information in the dialog box.
6. Select or clear the appropriate check boxes:
   - User must change password at next logon
   - User cannot change password
   - Password never expires
   - Account is disabled
7. Click Create, and then click Close.

To create a local group:

1. Right-click *My Computer* and select Manage.

   The Server Manager window opens.
2. Expand Configuration and the “Local Users and Groups” folder in the left pane.
3. Click Groups.

4. From the Action menu, click New Group.
5. Enter a name and optionally, a description for the new group.
6. To add one or more members to the new group, click Add.
7. In the Select Users, Computers, or Groups dialog box, under “Enter the object names to select,” type the name of the user account or group account that you want to add, and then click OK.
8. In the New Group dialog box, click Create, and then click Close.

FTP Client Access to a Workspace

After setting up the File Gateway server with an FTP Site, you can use any Windows or Macintosh system on the corporate network as an FTP client to upload or access files on the workspace you have shared.

Windows and Macintosh FTP clients are able to exercise all basic FTP functionality and FTP file transfers on an ISIS workspace using the command line interface and Internet browsers.

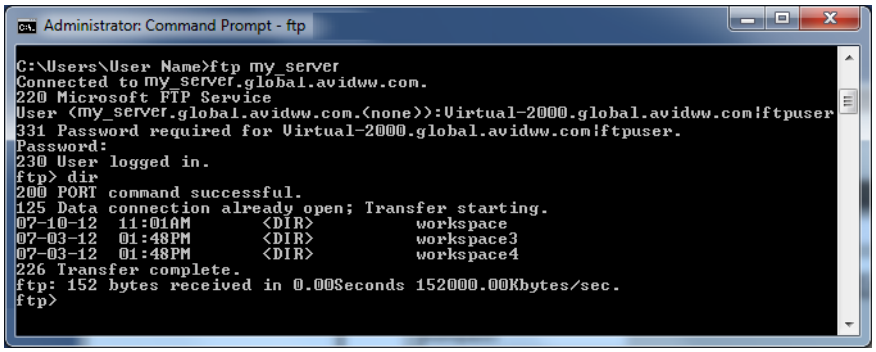
Accessing a Workspace from an FTP Client Using a Command Line

The Windows 2008 Storage Server operating system used in the Avid ISIS File Gateway server does not support the FTP Resume and FTP ReGet commands.

To access a workspace from a client (Windows):

1. Start your Windows system on the corporate network.
2. Click Start > Run.
3. Type **`ftp System_Director_hostname`** and press **`Enter`**.

   The Command Prompt window opens.



4. Type the virtual hostname or FTP user name and press **Enter**. In the example above, the virtual host name is Virtual-2000.global.avidww.com, and the user name is ftpuser.
5. Provide your authentication details (the Windows user name and password created on the File Gateway server).
6. Type **ls** or **dir** (to list the contents of the shared workspace.

   Type **cd \workspace_name** (to change directories).

Type Help at the ftp> prompt for a list of FTP commands. When finished with your FTP client session type "quit" to exit the session.

To access a workspace from a client (Macintosh):

1. Start your Macintosh system on the corporate network.
2. Open the Terminal window.
3. Type "ftp *FTP_FileGatewayServer_Name*" in the Open text box.
4. Provide your authentication details (the Windows user name and password created on the File Gateway server).
5. Type **ls** or **dir** (to list the contents of the shared workspace).

   Type **cd /workspace_name** (to change directories).

Type Help at the ftp> prompt for a list of FTP commands. FTP clients with ® OS 10.4.11 and earlier operating systems do not support the FTP command "Preserve" which allows the FTP client to retrieve or get a file by preserving the modification time. When finished with your FTP client session type "quit" to exit the session.

Accessing a Workspace from an FTP Client Using a Browser

To access a shared workspace from a client:

1. Start your Windows or Macintosh system on the corporate network.
2. Start your browser application.
3. Type "ftp *FTP_FileGatewayServer_Name*" in the Address bar text box.
4. Provide your authentication details (the Windows user name and password created on the File Gateway server).

You can alternatively use the following syntax in the browser address field: ftp://username:pwd@ftp_server_ name/workspace_name.

5. Browse to your workspace folder and drag-and-drop the files into and out of the browser window.

Any functionality available in the browser is limited by the browser's capability. For example, on Safari and Firefox, even if the FTP user has been granted write access, write options such as delete, rename, create file/folder, or move files do not work. This is a browser limitation.

A Dimensions and Weights

The Avid ISIS File Gateway server is rack-mountable in any standard 19-inch video racks using either NEMA or EIA mounting-hole layouts.

Dimensions and Weight Specifications

The following table provides the dimensions and weight of the Avid ISIS hardware and the optional rack components. Make sure the surfaces where you place the equipment can accommodate the equipment's size and weight.

Component Dimensions and Weight

Component	Height	Width	Depth	Weight
1 U File Gateway server	1.75 in (44.4 mm)	19 in (482.6 mm)	27 in (685.8 mm)	40.0 lb (18.1 kg) with drives installed

Electrical Specifications

The following table shows the electrical specifications for all the Avid hardware. Make sure your site meets these specifications.

Electrical Specifications

Component	Voltage	Frequency	Watts (Maximum)
1U File Gateway server	100 to 240 Vac Two hot-swap redundant AC power supplies	50 to 60 Hz	650 W

Environmental Specifications

The following table provides information on operating and storage temperature, and humidity specifications for the Avid hardware components. Make sure your environment meets the narrowest range of specifications in the table.

Environmental Specifications

Component	Operating Temperature	Operating Humidity	Storage Temperature
1U File Gateway server	32°F to 104°F (0°C to 40°C)	5% to 95% (at 38°C) non-condensing	–4°F to 140°F (–20°C to 60°C)

Uninterruptible Power Supply (UPS)

Avid highly recommends you create a separate derived power system for your ISIS File Gateway. This provides protection against sudden power surges or losses that could cause you to lose files or experience data corruption.The power outlets need to be from the same distribution panel. This helps prevent ground loops that can be caused by plugging equipment into power sources with different ground potentials. Make sure there is adequate, dedicated power for the UPSes.

All electrical work at your site must be done by a licensed electrician. The electrical changes must meet country, state, and local electrical codes.

The ISIS File Gateway supports UPS devices that are connected using network connections, USB connections, and serial connections. Install the software from the UPS manufacturer for advanced shutdown behavior, and to calibrate the UPS device. These software packages also allow for a connected Windows server to send alerts to other Windows servers to perform actions.

If your ISIS File Gateway is connected to a network, network policy settings might also prevent you from completing this procedure. Make sure there is adequate power and the correct receptacle type for each hardware component, the rack power strips, and the UPSes. Do not use extension cords to plug in any of the hardware components.

Supported Cabling

Avid supports the following cable types of Ethernet cables when connecting Zone 2 servers and clients to switches in the Avid workgroup environments. Also use these cable guidelines when connecting your clients and workstations to the File Gateway server.

If you need to run your cables greater distances, call Avid Customer Support for supported cable and accessory information. For cable connections, see the Avid Setup Guide for your product.

Supported Cables

Cable Connection Type	Function	Connector Style and Maximum Cable Length
Ethernet network cable, CAT5e, CAT6, or CAT6a	Connects: • Ethernet Avid clients • System Directors and clients to 1 Gb ports on an ISS • Avid Interplay servers to shared storage networks • Avid AirSpeed capture and playback servers to shared storage networks • Avid ISIS management port to laptop	RJ45 connector 100 Meters — If using CAT5e the cable must be rated for 350 MHz for maximum length. The minimum GigE cable length for Avid network products is 6 feet or 2 meters.

B Safety and Regulatory Information

This document contains safety and regulatory information for Avid hardware.

- Warnings and Cautions
- Proposition 65 Warning
- FCC Notice
- Canadian Notice (Avis Canadien)
- LED Safety Notices
- European Union Declaration of Conformity
- Disposal of Waste Equipment by Users in the European Union
- Argentina Conformity
- Australia and New Zealand EMC Regulations
- Japan EMC Regulations
- Korean EMC Regulations
- Taiwan EMC Regulations

Warnings and Cautions

This equipment is intended only for installation in a RESTRICTED ACCESS LOCATION.

Never install equipment if it appears damaged.

Disconnect the power cord before servicing unit.

Only perform the services explicitly described in this document. For services or procedures not outlined in this document, speak with authorized Avid service personnel.

Follow all warnings and cautions in the procedures.

Operate the device within its marked electrical ratings and product usage instructions.

If you need to replace a battery in an Avid hardware unit, be sure to use the correct battery type. There might be a risk of explosion if a battery is replaced by an incorrect type. Dispose of used batteries according to the manufacturer's instructions.

For products with a power switch the main power switch should remain accessible after installation.

Proposition 65 Warning

This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

FCC Notice

Part 15 of the Federal Communication Commission Rules and Regulations has established Radio Frequency (RF) emission limits to provide an interference free radio frequency spectrum. Many electronic devices produce RF energy incidental to their intended purpose.

Class A Equipment

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at personal expense.

Modifications

The FCC requires the user to be notified that any changes or modifications made to Avid hardware that are not expressly approved by Avid Technology may void the user’s authority to operate the equipment.

Cables

Connections to Avid hardware must be made with shielded cables with metallic RFI/EMI connector hoods in order to maintain compliance with FCC Rules and Regulations.

Canadian Notice (Avis Canadien)

Class A Equipment

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

LED Safety Notices

Avid hardware might contain LED or Laser devices for communication use. These devices are compliant with the requirements for Class 1 LED and Laser Products and are safe in the intended use. In normal operation the output of these laser devices does not exceed the exposure limit of the eye and cannot cause harm.

Standard to which conformity is declared: (Class 1 LED Product per IEC 60825-1:2007)

European Union Declaration of Conformity

CE

Declaration of conformity
Konformitätserklärung
Déclaration de conformité
Declaración de Confomidad
Verklaring de overeenstemming
Dichiarazione di conformità

We/Wir/Nous/WIJ/Noi:

Avid Technology
75 Network Drive
Burlington, MA, 01803 USA

European Contact: Nearest Avid Sales and Service Office or
Avid Technology International B.V.
Sandyford Industrial Estate
Unit 38, Carmanhall Road
Dublin 18, Ireland

declare under our sole responsibility that the product,
erklären, in alleniniger Verantwortung,daß dieses Produkt,
déclarons sous notre seule responsabilité que le produit,
declaramos, bajo nuestra sola responsabilidad, que el producto,
verklaren onder onze verantwoordelijkheid, dat het product,
dichiariamo sotto nostra unica responsabilità, che il prodotto,

Product Name(s): ISIS

Model Number(s): 7020-30088-XX

Product Option(s): This declaration covers all options for the above product(s).

to which this declaration relates is in conformity with the following standard(s) or other normative documents.
auf das sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder Richtlinie(n) übereinstimmt.
auquel se réfère cette déclaration est conforme à la (aux) norme(s) ou au(x) document(s) normatif(s).
al que se refiere esta declaración es conforme a la(s) norma(s) u otro(s) documento(s) normativo(s).
waarnaar deze verklaring verwijst, aan de volende norm(en) of richtlijn(en) beantwoordt.
a cui si riferisce questa dichiarazione è conforme alla/e seguente/i norma/o documento/i normativo/i.

The requirements of the European Council:

Safety: Directive 2006/95/EC

UL 60950-1, 2nd edition
CAN/CSA-C22.2 No. 60950-1-07; 2007
IEC 60950-1, 2nd edition
EN 60950-1:2006

EMC: Directive 2004/108/EC

EN55022:2006 /A1:2007
EN55024:1998 /A1:2001 /A2:2003
EN61000-3-2:2006
EN60000-3-3:1995 /A1:2001 /A2:2005

Gerrett Durling, VP of Engineering, Shared Services

Issued In Burlington MA, USA 2011

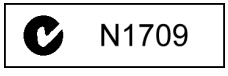
Disposal of Waste Equipment by Users in the European Union

This symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.

Argentina Conformity

Made in USA

Australia and New Zealand EMC Regulations



Ken Hopkins
Avid Technology (Aust) Pty Ltd
c/o – Elliot House
Suite 810, Level 8
140 Arther St
North Sydney
NSW – 2060

Japan EMC Regulations

Class A Equipment

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take corrective actions. VCCI-A

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI－A

Korean EMC Regulations

Class A Equipment

Please note that this equipment has obtained EMC registration for commercial use. In the event that it has been mistakenly sold or purchased, please exchange it for equipment certified for home use.

이 기기는 업무용(A급) 전자파적합기기로서 판
매자 또는 사용자는 이 점을 주의하시기 바라
며, 가정외의 지역에서 사용하는 것을 목적으로
합니다.

Taiwan EMC Regulations

Taiwan EMC Regulations BSMI Class A EMC Warning

警告使用者:
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Warning Statement

1. **UV ray radiation**
   - Following statement or equivalent:

     警告： 開啟前請先關閉UV 燈

   - Following marking or other equivalent marking:

2. **Operator touchable area protection**

   Operation manual should have following statement and statement should be shown on device, or put on similar sentence:

   警告

   危險可動部位

   請遠離手指及身體其他部位

3. **Heat-related hazards**

Injury may result from high temperatures under normal operating conditions, causing:

- Burns due to contact with hot accessible parts
- Degradation of insulation and of safety-critical components
- Ignition of flammable liquids

Examples of measures to reduce risks include:

- Taking steps to avoid high temperature of accessible parts
- Avoiding temperatures above the ignition point of liquids
- Provision of marking to warn USERS where access to hot parts is unavoidable

High temperature warning marking — you may use the following high temperature warning marking:

4. Mechanical hazards

   Injury may result from:

   - Sharp edges and corners
   - Moving parts which have the potential to cause injury
   - Equipment instability
   - Flying particles from imploding cathode ray tubes and exploding high pressure lamps

   Examples of measures to reduce risks include:

   - Rounding of sharp edges and corners
   - Guarding
   - Provision of SAFETY INTERLOCKS
   - Providing sufficient stability to free-standing equipment
   - Selecting cathode ray tubes and high pressure lamps that are resistant to implosion and explosion respectively
   - Provision of markings to warn USERS where access is unavoidable

5. **Radiation**

   Injury to USERS and to SERVICE PERSONS may result from some forms of radiation emitted by equipment.

Examples are sonic (acoustic), radio frequency, infra-red, ultraviolet and ionizing radiation, and high intensity visible and coherent light (lasers).

Examples of measures to reduce risks include:

- Limiting the energy level of potential radiation sources
- Screening radiation sources
- Provision of SAFETY INTERLOCKS
- Provision of markings to warn USERS where exposure to the radiation hazard is unavoidable

6. **Chemical hazards**

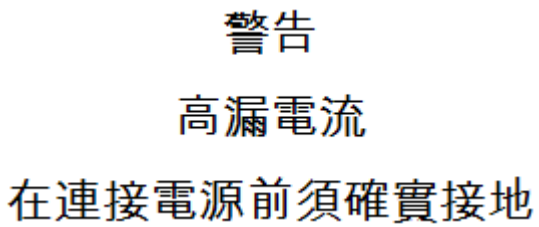
   Injury may result from contact with some chemicals or from inhalation of their vapors and fumes.

   Examples of measures to reduce risks include:

   - Avoiding the use of constructional and consumable materials likely to cause injury by contact or inhalation during intended and normal conditions of use
   - Avoiding conditions likely to cause leakage or vaporization
   - Provision of markings to warn USERS about the hazards

7. **Safety warning statement for equipment that is under hazardous voltages**
8. **Equipment with touch current exceeding 3.5 mA**

   One of the following labels, or a label with similar wording, shall be affixed adjacent to the equipment AC MAINS SUPPLY connection:



9. **An EUT that provides TELECOMMUNICATIONS NETWORK connection ports for connection of multiple items of other telecommunications equipment shall not create a hazard for USERS and TELECOMMUNICATIONS NETWORK SERVICE PERSONS due to summation of TOUCH CURRENT**

警告

高漏電流

在連接電信網路

前須確實接地

警告

高接觸電流

在連接電信網路

前須確實接地

10. **Replaceable batteries**

If an equipment is provided with a replaceable battery, and if replacement by an incorrect type could result in an explosion (for example, with some lithium batteries), the following applies:

- If the battery is placed in an OPERATOR ACCESS AREA, there shall be a marking close to the battery or a statement in both the operating and the servicing instructions
- If the battery is placed elsewhere in the equipment, there shall be a marking close to the battery or a statement in the servicing instructions

The marking or statement shall include the following or similar text:

警　告

本電池如果更換不正確會有爆炸的危險

請依製造商說明書處理用過之電池

11. **Warning to service persons**

Suitable markings shall be provided on the equipment or a statement shall be provided in the servicing instructions to alert a SERVICE PERSON to a possible hazard, where both of the following conditions exist:

- Where a fuse is used in the neutral of single-phase equipment either permanently connected or provided with a non-reversible plug
- Where, after operation of the fuse, parts of the equipment that remain energized might represent a hazard during servicing

The following or similar wording is regarded as suitable:

注意

雙極性 / 中性線已接熔線

Avid
75 Network Drive
Burlington, MA 01803-2756 USA

Technical Support (USA)
Visit the Online Support Center at
www.avid.com/support

Product Information
For company and product information,
visit us on the web at www.avid.com